

Date: Monday, 1/8/2007 10:41:12 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206 CABINE HEATER TUBE ASSEMBLY		
Job Number	: 30134	Part Number	: D2003049		
Estimate Number	: 11922	Drawing Number	: UNDER REVIEW		
P.O. Number	: N/A	Project Number	: N/A		
This Issue	: 1/8/2007	S.O. No.	: N/A		
Prsht Rev.	: NC	Drawing Revision	: B		
First Issue	: N/A	Material	: N/A		
Previous Run	: N/A	Due Date	: 2/5/2007	Qty:	5 Um: Each
Written By	:				
Checked & Approved By	:				
Comment	: Est B 03.03.31 Reformat KJ/RF				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M304TR0500W035	304 RD Tube .500 x .035W	
		Comment: Qty.: 2.9750 f(s)/Unit Total : 14.8748 f(s) 304 RD Tube .500 x .035W Cut tube Ø 0.500" x 0.035" wall as per template D2003-049T1 (34.00" long) Material: AISI 304 SS tubing(M304TR0.500x0.035) Batch: m102958 / m102742	MF. 07-01-22
2.0	D2182045	Heat Shrink 4.5" Long	
		Comment: Qty.: 1.0000 Each(s)/Unit Total : 5.0000 Each(s) Heat Shrink 4.5" Long Cut: Qty Part Number Description Batch	
		1 D2182-045 Heat Shrink	VB 26009
3.0	M26506	Firesleeve-crkl .375IDia	
		Comment: Qty.: 2.9050 f(s)/Unit Total : 14.5252 f(s) Firesleeve-crkl .375IDia Cut: Qty Part Number Description Batch	
		1 M2650-6 Heat Sleeve	m103232
			MF. 07-01-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:41:13 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 CABINE HEATER TUBE ASSEMBLY

Job Number: 30134

Part Number: D2003049

Job Number:



Seq. #: Machine Or Operation:

Description :

4.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Cut 33.2" long Heat sleeve as per Dwg D2003 & heat shrink

Form tube as per template D2003-049T2

MF. 07-01-23

MF. 07-01-23

5.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/01/23 (S)

6.0 AN8188J

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Nut

Pick:

Qty	Part Number	Description	Batch
2	AN818-8J	Nut	m101189

MF. 07-01-30

7.0 MS208198J

Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total : 10.0000 Each(s)

Sleeve

Pick:

Qty	Part Number	Description	Batch
2	MS20819-8J	Sleeve	m10304x6 m103176x4

MF. 07-01-30

8.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D2003

MF. 07-01-30

Install Red decal and heat shrink as per PPP D2003-049

MF. 07-01-30

9.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SB 07/02/01 (S)

10.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST.201

RJ/02/01 (S)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA:  Date: 07/02/05
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 1/8/2007 10:41:13 AM
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Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 CABINE HEATER TUBE ASSEMBLY

Job Number: 30134

Part Number: D2003049

Job Number:



Seq. #: Machine Or Operation:

Description :

11.0 QC21

FINAL INSPECTION/W/O RELEASE



(5)

Comment: FINAL INSPECTION/W/O RELEASE

1/8/02/05

Job Completion



1/8/02/02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D2003	
DATE		REV. B SHEET 1 OF 2	
99.06.08		TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	
A	90.04.09	SCALE NEW ISSUE	
B	99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)	

RELEASED

49.06.08 RE

NOTE: FLAT LENGTHS MAY BE
INCORRECT. BENDS TO BENT
TUBE. REPORT TO ENGINEERING

UNDER REVIEW

CC 08.21 CB

some flat 06.12.13
lengths wrong

P/N	TEMPLATE	HEATSLEEVE LENGTH ¹	CUT LENGTH OF TUBE ²	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC	MATERIAL ^{4/6/7}	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	7.3	8.12							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-005	T2003-005	9.8	10.62							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	20.0	19.63							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-009	12.38	12.44							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	33.31	32.38							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-013	T2003-013	12.7	13.54							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-015	T2003-015	17.2	18.00							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	17.0	16.25							2 2 TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	9.8	10.62		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-021	T2003-021	N/A	2.25		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-023	T2003-023	4.5	5.33		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-025	T2003-025	9.8	10.60		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-027	T2003-027	7.25	7.38		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-029	T2003-029	17.2	18.00		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-031	T2003-031	14.6	15.38	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29.75	29.62	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0	34.00	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34.00	2 2						TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25					1 1		JET	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-101	T2003-101	13.25	13.13					2 2		TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-103	T2003-103	12.38	12.00					2 2		TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-105	T2003-105	10.75	10.60					2 2		TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-107	T2003-107	12.75	12.25					2 2		TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-109	T2003-109	8.25	8.125		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.625		2 2					TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-116	T2003-116	4.0								HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-14	4.0								HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-16	T2003-16	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60				2 2			TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-207	T2003-207	3.75	3.75				2 2			TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6

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WITHOUT NOTICE

WORK ORDER
NO. 30134

DARTDRAFT COPY
ISSUED

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2003
DATE	99.06.08	TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS SCALE

RELEASED
99.06.08 KE**UNDER REVIEW**

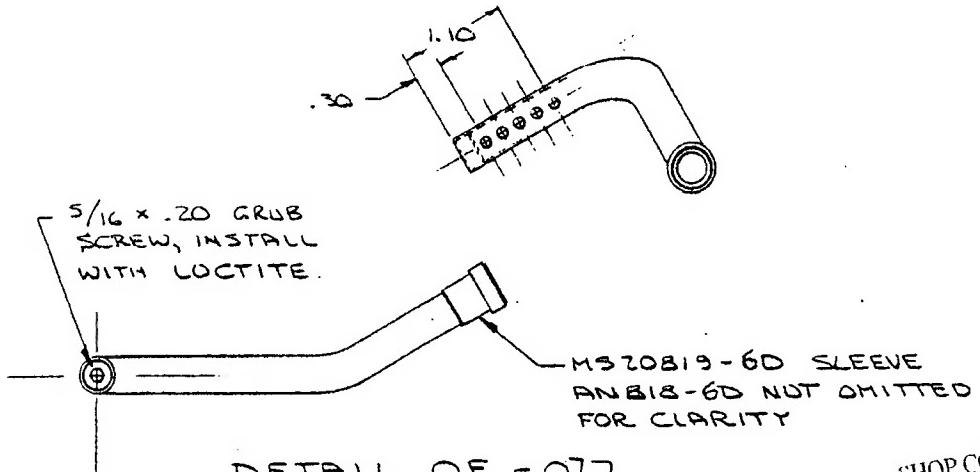
06.08.21 CB

06.12.13

Some flat lengths
~~and~~ wrong

Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

DETAIL OF - 077

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